S.D. Warren Company	)	Department
<b>Cumberland County</b>	)	Findings of Fact and Order
Westbrook, Maine	)	Part 70 Air Emission License
A-29-70-B-A	)	Amendment #1

After review of the Part 70 Administrative Revision application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to Chapters 115 and 140 and to 38 M.R.S.A, Section 344 and Section 590, the Department finds the following facts:

## I. Registration

# A. Introduction

FACILITY	S.D. Warren Company Westbrook Mill (S.D. Warren)
LICENSE NUMBER	A-29-70-A-I
LICENSE TYPE	Initial Part 70 License
NAICS CODES	322121
NATURE OF BUSINESS	Papermill
FACILITY LOCATION	Westbrook, Maine
INITIAL LICENSE ISSUANCE DATE	December 31, 2003
AMENDMENT ISSUANCE DATE	November 19, 2004
LICENSE EXPIRATION DATE	December 31, 2008

### B. Nature of Revision Request

S.D. Warren of Westbrook, Maine has requested an Administrative Revision of their current Part 70 Air Emission License to update/correct particulate matter (PM) emissions restrictions for the catalytic incinerator associated with the operation of the facility's #20 Coater machine.

# C. Application Classification

Part 70 Minor Revision procedures may be used for a revision of state-only requirements at a facility with a licensed emissions increase under four (4) tpy for any one regulated pollutant and under eight (8) tpy of total regulated pollutants, and is determined not to be a Major or Minor Modification of a Part 70 source, a Part 70 Major or Minor Change, and is greater than an insignificant activity as defined in Chapter 140. The PM restrictions for the #20 Coater catalytic incinerator will amount to an increase of 3.99 ton/yr of a single criteria pollutant, therefore this request has been processed as a Part 70 administrative revision and meets the requirements of such.

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# D. <u>Justification for Revision Request</u>

The catalytic incinerator was originally given a PM emission restriction of 0.12 pounds per hour (lb/hr). This restriction was based on data supplied to S.D. Warren by the equipment supplier, ARI International (ARI), through which the catalytic incinerator was purchased. ARI predicted that catalyst attrition (catalyst wearing) would result in PM emission rates of approximately 0.2 pounds per million standard cubic feet (MMSCF) of oven exhaust gas. At an exhaust flow rate of approximately 8,500 standard cubic feet per minute (SCFM), PM emissions were predicted to be approximately 0.1 lb/hr. After having tested the incinerator, at the Departments request, for PM emissions, it was found that emissions are much higher than originally expected, due to catalyst attrition rates higher than originally expected. S.D. Warren has requested an Administrative Revision to their Part 70 Air Emission License to increase the hourly PM restrictions for the #20 Coater catalytic incinerator from 0.12 lb/hr to 4.0 pounds per hour and establish an annual PM emissions restriction of 3.99 tons per year (ton/yr).

In conjunction with the PM emissions restriction increase to 4.0 lb/hr and the establishing of the annual PM ton/yr restriction for the catalytic incinerator, S.D. Warren will be required to test for PM emissions from the catalytic incinerator by March 30, 2005, again in 2006 and biennially there after. Beginning with the test in 2006, the PM testing can be done in conjunction with the currently required biennial VOC testing.

In order to demonstrate compliance with the PM emissions restriction, S.D. Warren shall be required to maintain an operations log, recording the date and duration of operation of the incinerator, the coating being utilized on #20 Coater at the time of operation and the PM emissions calculation. PM emissions shall be calculated using an average hourly PM emissions rate as determined by averaging the PM emissions tests results.

- S.D. Warren shall establish a system of maintenance, inspection and repair for the catalytic incinerator, which shall allow for periodic inspection of the system. S.D. Warren shall document compliance by means of a maintenance, inspection and repair log, which can be part of the operation log, in which S.D. Warren shall record the date, time and amount of catalyst addition to the incinerator and all routine maintenance as well as all inspection dates and findings.
- S.D. Warren shall also be required to undertake a program to develop feasible approaches to further reduce PM emissions from the catalytic incinerator. S.D. Warren shall establish the PM emissions reduction program and submit a written description of the program to the Department within 4-months of the signing of this license amendment.

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E. Facility PM Emissions

# **Corrected Total Annual Licensed PM Emissions for the Facility**

Pollutant			En	nissions in T	ons/Year		
	<u>#17,</u>		Tech.	<u>#35</u>	#20 Coater	#2 Coater	
	<i>#</i> 18, <i>#</i> 20	<b>Diesels</b>	<u>Center</u>	Research	<u>and</u>	and 4th	
	and #21	#2 and	<b>Boiler</b>	<u>Coater</u>	<b>Catalytic</b>	Zone	
	<b>Boilers</b>	<b>#4</b>		<b>Dryer</b>	<b>Incinerator</b>	Dryer	<b>Total</b>
$PM/PM_{10}$	523.0	37.7	0.2	0.4	4.49	0.7	566.49

#### ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this sources:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources

The Department hereby grants Part 70 Administrative Revision A-29-70-B-A, subject to the conditions found in Part 70 License A-29-70-A-I and the following conditions:

# The following shall replace Condition (25), paragraph I. in Air Emissions License A-29-70-A-I:

(25) I. S.D. Warren shall establish a system of maintenance, inspection and repair for the catalytic incinerator, which shall allow for periodic inspection of the system. S.D. Warren shall document compliance by means of a maintenance, inspection and repair log, in which S.D. Warren shall record the date, time and amount of catalyst addition to the incinerator and all routine maintenance as well as all inspection dates and findings. [MEDEP Chapter 140, BACT]

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The following shall replace Condition (25), paragraph J, in Air Emissions License A-29-70-A-I:

(25) J. Emissions from the catalytic incinerator shall not exceed the following limits:

Pollutant	lb/hr	Origin and Authority
PM	4.0	MEDEP Chapter 140, BPT
$PM_{10}$	4.0	MEDEP Chapter 140, BPT
$SO_2$	0.006	MEDEP Chapter 140, BPT
$NO_x$	1.0	MEDEP Chapter 140, BPT
CO	1.8	MEDEP Chapter 140, BPT

The following shall be in addition to Condition (25) in Air Emissions License A-29-70-A-I:

- (25) L. In order to more accurately determine PM emissions from the #20 Coater catalytic incinerator, S.D. Warren Company shall perform PM emissions testing on the catalytic incinerator by March 30, 2005, again in 2006 and biennially there after. Beginning with the test in 2006, the PM testing can be done in conjunction with the currently required biennial VOC testing. [MEDEP Chapter 140, BACT]
  - M. Annual PM emissions from the #20 Coater catalytic incinerator shall be restricted to no greater than 3.99 tons per year (ton/yr), based on a twelve-month rolling total. S.D. Warren shall apply to amend their current Part 70 Air Emission License to eliminate the 3.99 ton/yr limit Department within 4-months of the signing of this license amendment. [MEDEP Chapter 140, BACT]
  - N. To demonstrate compliance with PM emissions restrictions, S.D. Warren shall be required to maintain an operations log, recording the date and duration of operation of the incinerator, the coating being utilized on #20 Coater at the time of operation and the hourly and twelve-month rolling total PM emissions calculation. PM emissions shall be calculated using an average hourly PM emissions rate as determined by averaging the hourly PM emissions rates from the PM emission test results. [MEDEP Chapter 140, BACT]

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approaches to further reduce P S.D. Warren shall establish the F written description of the progra	to undertake a program to develop feasible M emissions from the catalytic incinerator. M emissions reduction program and submit a m to the Department within 4-months of the at. [MEDEP Chapter 140, BACT]			
DONE AND DATED IN AUGUSTA, MAI	NE THIS DAY OF 2004.			
DEPARTMENT OF ENVIRONMENTAL I	PROTECTION			
BY: DAWN R. GALLAGHER, COM	IMISSIONER			
This license shall expire concurrently with license A-29-70-A-I.				
PLEASE NOTE ATTACHED SHEET FOR GU	TDANCE ON APPEAL PROCEDURES			
Date of initial receipt of application: <b>November</b> Date of application acceptance: <b>November</b>				
Date filed with the Board of Environmental	Protection			
This Order prepared by Peter G. Carleton, Bureau of	Air Quality.			